### I. The Problem: "Does the Public Understand?"

or the past 50 years, Kentucky has constructed a federal and state subsidized highway and bridge network that appears to provide unlimited access and mobility at no cost. The public tends to think about travel on the highway system in the context of the trip being made. Whether it is to work, to school, to shop, to vacation, or to leisure activities, we assume that when we pull out of our driveways that we are going to be able to travel safely, while tolerating some degree of acceptable congestion, to our chosen destination via the highway network. We have grown to take for granted "usability" of the highway system because it has never been endangered. If there was a pothole to be fixed, it was fixed. If there were new traffic signals or signs needed, they appeared. If new highway capacity was needed to make our trip easier, it miraculously appeared or was at least in the "talking" stages of being planned for the future. Even with no new revenue growth, roads and bridges were maintained and new capacity was added to the network. It was just a matter of where the priorities for spending money were, as determined by transportation agencies, Congress, and state legislatures.

For the most part, Kentucky's citizens do not have a clear understanding of how motor fuel taxes and user fees are included in the price of a gallon of gasoline. This creates unique difficulties for transportation agencies when the public watches the price of a gallon of gas steadily climb as they have in the past few years to almost \$4 per gallon. The public is unable to fully appreciate that the 38 cents per gallon that goes to state and federal tax coffers has remained relatively constant for decades. While there are other factors that serve to boost gasoline prices, the tax burden always seems to be a major point of contention. Although taxes on motor fuels are actually user fees, these have become invisible to the consumer since the fees are blended with the purchase price for a gallon of fuel. Therefore, the public perception is skewed by higher gas prices, even though governments do not proportionately share in those price increases. Studies have shown that the public wants government to invest properly in transportation infrastructure, as long as that investment generates visibly better roads and bridges. The real "disconnect" occurs when the public cannot fully appreciate how the primary method of tax collection (the gas tax) is shrouded in prices at the pump that can change by as much as 25 cents on any given day.

In this fast paced world, our citizens have largely taken for granted the provision of a safe and convenient highway network. Until the tragedy of the Minneapolis bridge collapse last summer, transportation agencies were plodding along, stretching rapidly-devaluing highway dollars as far as they could. The Minneapolis tragedy brought a realization that aging highway infrastructure must be properly maintained. This caused the transportation community to be even more diligent to ensure that our roads and bridges are indeed as safe as they can be. Transportation has a tremendous ability to influence our daily lives way beyond our trip experiences. Every delivered good and service has a transportation component. From the food, clothes, and appliances bought from grocery and retail stores, to the medical services, cell phones, IPods, computers, and internet purchases delivered by UPS and others, every part of our "Quality of Life" is a result of the accessibility and mobility that the highway network provides. Kentuckians have gotten used to a very good highway system, and it is difficult for anyone to envision our lives with a highway network that is less effective than it is today.

Across Kentucky, our citizens are realizing that aging pavements, bridges, and signal systems need attention. Often our highways are in reasonable repair, but just do not have enough lanes to handle the traffic demand. Communities that desire to improve their economic fortunes see their hopes dampened by the lack of access in rural areas or overwhelming congestion in urban centers. Whether the issue is the condition of the pavement on I-75, the narrow bridges on US 68/KY 80 at Lake Barkley and Kentucky Lake, or the need to construct the Louisville Bridges Project to bolster the state's most powerful economic engine, Kentucky is indeed at a transportation crossroads. Does the public understand this problem? We believe the answer is "no." It is the Kentucky Transportation Cabinet's (KYTC) challenge to engage the public in the debate that is necessary to choose the right path for the future.

# II. The Issue: "How do we attain Public Trust?"

irst and foremost, the Highway Plan process in Kentucky must prove itself trustworthy by delivering quality transportation projects on time and within budget. This is not easily done; it takes time and repeated performance to overcome past problems. The KYTC, Congress, and the General Assembly must be honest and transparent in the decisions that are made regarding our highway system and the plans that are made to keep it functional. We must be accountable for our actions, and it is the goal of the KYTC to develop performance measures that can be shared with the public to ensure that we are earning the right to pursue needed highway improvements on their behalf. Together with Congress and the General Assembly, we can and must keep customer service as our primary objective. Only then will our customers, the traveling public, allow us to regain their confidence. It is our goal to carry transportation issues to the public, enlist public support and understanding, and deliver projects and programs that meet the funding levels at our disposal thereby creating the Public Trust that is an integral part of Kentucky's future economic success.

# III. Revenue Estimates and Assumptions: "How can reality temper Public Expectations?"

ne of the greatest challenges confronting the KYTC is "managing public expectations." As discussed in previous sections, highway maintenance costs are far from routine when a major bridge can cost \$200 million to replace, a mile of interstate highway pavement can cost \$5 to \$10 million to repair, and the overall identified highway needs across the Commonwealth total more than \$50 billion. In the face of these overwhelming basic needs, at least four "Mega-Projects" have been initiated with no clear way to fund those projects. Past highway plans have permitted the unrestrained pursuit of such needs to the point that the 2008 Highway Plan is under-funded by over \$3 billion. In this funding environment, the public is bound to be frustrated by the government's inability to meet such highway needs satisfactorily. Managing expectations is a difficult challenge when the needs are great, patience is exhausted, and satisfaction is less than immediate. This is the backdrop against which the 2008 Highway Plan was developed.

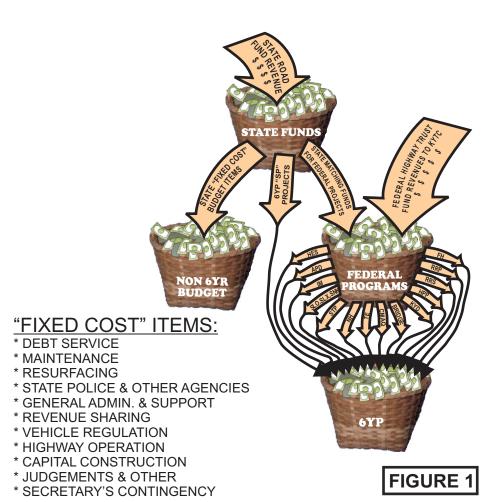
The 2008 Highway Plan is predicated upon a number of assumptions about the revenue stream that is expected for future federal and state highway construction programs administered by the KYTC. An illustration of the funding process is shown as **Figure 1**, with the area of emphasis for this particular document being those funding elements that contribute directly to the Highway Plan. The discussion that follows is given as an overview of the scope and magnitude of these assumptions.

As shown in **Figure 2**, both federal and state Highway Plan revenue sources have been considered, and projections made, based on the most reliable financial information available. The relative proportions of federal and state highway funds made available to the KYTC for major highway projects are displayed in **Figure 3**. These charts show that state funds comprise less than one-fifth of the total dollars expected to be made available for major highway improvements in Kentucky between 2009 and 2014.

Consistent with past trends and current forecasts, this edition of the Highway Plan is being developed on the basis of the current federal transportation authorization act, SAFETEA-LU, and state revenue estimates consistent with projections made by the Consensus Forecast Group (CFG). The CFG is a committee of specially-designated experts whose revenue forecasts are used by the Executive Branch and the General Assembly to craft the biennial state budget.

It is important to note that the ability of the Cabinet to undertake major new state-funded projects is a function of

available Road Fund cash and the careful management of Road Fund expenses "on the margin." The Cabinet is committed to managing cash to a "floor" of \$100 million. The cash management process currently yields daily cash balances for internal use, and provides information for monthly meetings where estimated future cash outlays can be updated and project funding decisions can be refreshed. As the KYTC continues to gain experience with this process, our confidence is growing in both the methodology and the resulting cash flow decisions.



# 2008 HIGHWAY PROGRAM ANTICIPATED FUNDING LEVELS

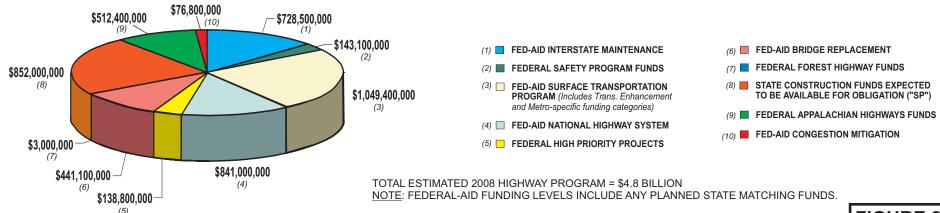
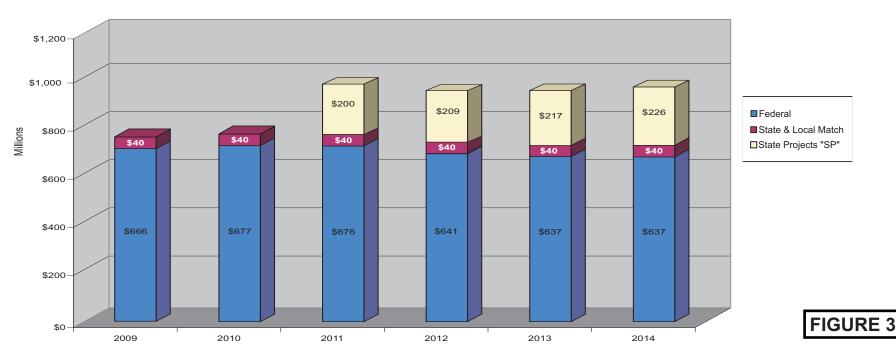


FIGURE 2

### FEDERAL AND STATE HIGHWAY FUNDING LEVELS AVAILABLE FOR OBLIGATION FROM 2009 THRU 2014

(as estimated by the Kentucky Transportation Cabinet)



# A. Federal Revenue Estimates and Assumptions

The 2009 - 2014 federal revenue forecasts are based on the Safe. Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the most recent transportation reauthorization act. SAFETEA-LU was enacted by the United States Congress in 2005 and provided identified levels of funding dedicated to each state through 2009. These statespecific levels of funding were broken down into individual program funding categories as determined by SAFETEA-LU's application to Federal Highway Trust Fund formulas. For the purposes of this edition of the Highway Plan, fiscal years 2010 through 2014 were assumed to be equivalent to those for FY 2009, the last year of SAFETEA-LU.

Figure 4 shows the final federal fund target amounts used to fiscally balance the

Funding Category	FY-2009	FY-2010	FY-2011	FY-2012	FY-2013	FY-2014	2009-2014 TOTAL FUNDING
Appalachian Development (APD)*	85.4	85.4	85.4	85.4	85.4	85.4	512.4
Bridge Replacement On-System (BRO)**	45.9	48.2	48.2	48.2	48.2	48.2	286.9
Bridge Replacement On/Off (BRX)**	14.1	14.8	14.8	14.8	14.8	14.8	88.1
Bridge Replacement Off (BRZ)**	10.6	11.1	11.1	11.1	11.1	11.1	66.1
Congestion Mitigation (CMAQ)**	12.3	12.9	12.9	12.9	12.9	12.9	76.8
Forest Highways (FH)	0.5	0.5	0.5	0.5	0.5	0.5	3.0
Interstate Maintenance (IM)**	116.5	122.4	122.4	122.4	122.4	122.4	728.5
National Highways (NH)**	134.5	141.3	141.3	141.3	141.3	141.3	841.0
Rail Protect. Devices (RRP)	1.8	1.8	1.8	1.8	1.8	1.8	10.8
Rail Separation (RRS)	1.8	1.8	1.8	1.8	1.8	1.8	10.8
Hazard Elimination (HES)	19.5	20.4	20.4	20.4	20.4	20.4	121.5
STP-Henderson (SHN)	0.4	0.4	0.4	0.4	0.4	0.4	2.4
STP-Louisville (SLO)	13.1	13.8	13.8	13.8	13.8	13.8	82.1
STP-Lexington (SLX)	4.5	4.7	4.7	4.7	4.7	4.7	28.0
STP-Northern Kentucky (SNK)	4.9	5.1	5.1	5.1	5.1	5.1	30.4
Surface Transportation (STP)***	132.0	138.6	138.6	138.6	138.6	138.6	825.0
Transportation Enhancement (TE)	13.0	13.7	13.7	13.7	13.7	13.7	81.5
High Priority Projects (HPP)	54.7	40.5	39.5	4.1	0.0	0.0	138.8
Kentucky Appropriations Earmarks (KYD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal Federal Program	\$665.5	\$677.4	\$676.4	\$641.0	\$636.9	\$636.9	\$3,934.1

<sup>\*</sup>Includes 20% state match

FIGURE 4

2008 Highway Plan. According to these estimates of category-by-category funding expectations, the total federal-aid dollars flowing to the Highway Plan from FY 2009 through FY 2014 is anticipated to be about \$3.9 billion. Combined with the remaining federal FY 2008 funds, the federal projects in this document total about \$4.5 billion. It is possible that the final federal appropriations may be altered significantly over the next few years if Congress fails to enact adjustments to the Federal Highway Trust Fund. Beginning in FY 2009, the projected Highway Account balance is below the amount needed to keep the program running at current levels and could result in a cut of 40% to FY 2009 funding levels alone. Such a reduction would return Kentucky's federal-aid highway program to pre-1998 levels. Each year that Congress allows the situation to continue, the problem will deepen. It should be understood that all of the federal programs outlined in this edition of the Highway Plan are predicated upon the assumption that Congress will address the Federal Highway Trust Fund problem, as the failure to do so will lead to potentially catastrophic results to the nation's highway system.

Kentucky's federal highway program will be largely matched with "toll credits." These credits are attributed to Kentucky by federal highway law in accordance with calculations that consider past levels of state fund investment, such as state-sponsored toll roads, in the federal highway system. Toll credits do not generate cash and cannot be accounted as such. They do, however, permit the KYTC the

<sup>\*\*</sup>Reflects 2% takedown for SPR; toll credits for match

<sup>\*\*\*</sup>Reflects 2% takedown for SPR; 10% set aside for TE Program

flexibility to use 100% federal funding on federal-aid projects. By doing so, the KYTC can allocate more of its own funding for state "SP" projects under complete state control and supervision, as defined below in "Section III, Part B."

#### B. State Fund ("SP") Revenue Estimates and Assumptions

A forecast of \$851.9 million in state Road Fund cash is expected to be available to support new "SP" project obligations over the life of the 2008 Highway Plan. This amount is based on a number of assumptions about project cost payouts, revenues accruing to the Road Fund, non-Six-Year Plan costs, state matching fund payouts, unexpected cost increases, and project change orders. It would be too exhaustive to attempt to describe each of these issues in detail and, for the purposes of this document, it is important to underline that the "SP" obligation targets derived through this model are only targets. The actual decisions about when to obligate "SP" dollars and how much "SP" work can be afforded at any point in time will be made by the Secretary of Transportation and based on monthly cash management evaluations he receives from the KYTC's "Authorization Review Team (ART)."

The ART consists of the Cabinet's Chief of Staff. the State Highway Engineer and his deputies, and the KYTC Budget Director. These individuals meet on a monthly basis to carefully evaluate actual expenditures for the prior month and planned expenditures for upcoming months relative to the future fiscal capacity calculated from ongoing project and program cost projections. planned "SP" project funding decision undergoes a rigorous two-part assessment in which the following questions are asked: (1) is the project ready to move forward from the project development standpoint, and (2) can we afford to move the project forward considering the cash flow implications of doing so? Only a satisfactory response to both questions permits a project to move forward in the funding process.

During the past two years, the ART has permitted the authorization of \$2.6 billion in construction awards, as well as hundreds of millions of dollars more in preconstruction, maintenance, and other highway program activities. As a result, a serious cash flow issue has emerged in recent months as budget projections and major design/build project costs became known. **Figure 5** 

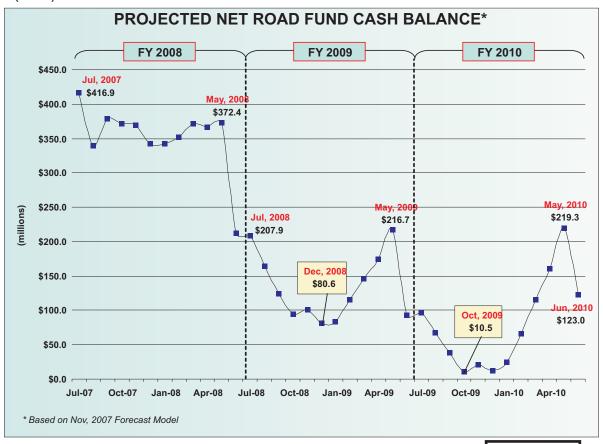


FIGURE 5

shows that the current monthly Road Fund cash balance is running at about \$350 to \$400 million, but as already authorized project costs are paid in the months ahead, we expect to see a considerable dip in the cash availability to a low point of about \$10.5 million in October, 2009. The ART is taking the necessary steps to reassess all planned program outlays and will determine the optimum manner to assure that the October 2009 low balance is not permitted to occur. Necessary actions may require the de-obligation of active projects, expedited closing of old, completed projects, or stretching out the payments for some of the larger projects being constructed. Our goal is to return the cash balance to the \$100 million baseline as quickly as possible.

In summary, all of the KYTC's best projections of revenues and program costs indicate that additional "SP" obligations will be possible in the following amounts for each fiscal year (please note that the cash conditions described in the previous paragraph will result in zero dollars available for state-funded Highway Plan projects in FYs 2009 and 2010):

Total for 6 Years	\$852 Million
2014	\$226 Million
2013	\$217 Million
2012	\$209 Million
2011	\$200 Million
2010	\$0 Million
2009	\$0 Million

### C. Federal and State Estimates and Assumptions in Concert

Federal and state highway project funding for FY 2009 through FY 2014 totals \$4.8 billion. If we add the carry-over state and federal funding from FY 2008, the total revenue expectation that supports projects in this edition of the Highway Plan is \$5.3 billion. It is important to note that Kentucky has utilized federal pre-financing provisions heavily and continues to roll a consistent level of these carry-forward obligations from year-to-year. At the end of FY 2007, Kentucky had pre-financed some \$500 million in federally funded projects, supporting the associated project billings from State Road Fund cash until the federal share of these costs can be billed to the federal government the following year. By using this funding mechanism, Kentucky has maximized its ability to return federal dollars to the state more quickly, while at the same time accelerating many federal highway projects. Federal pre-financing requires that the Road Fund keep approximately \$50 million on hand to cover the advance state fund outlays in support of the federal program acceleration. The Cabinet must continually monitor the "net cash balance" which results from month-to-month consideration of this federal program flexibility.

It is also important to note that the KYTC will explore all opportunities to use innovative financing options permitted under federal transportation law. In particular, we will seek to continue the use of GARVEEs (Grant Anticipated Revenue Vehicles) to accelerate federal funding of major projects where those projects buy essential improvements that we would otherwise have to save for to be able to afford. GARVEEs use the principle of guaranteed future federal-aid highway revenues as a mechanism to support the sale of revenue bonds for specific projects. The status of \$440 million of GARVEE projects authorized by the 2005 General Assembly is outlined in Appendix A of this document. As we look forward, it is the KYTC's goal to continue to exercise this program when prudent, and the funding horizon indicates that we may desire to use GARVEEs again in 2011 to finance a portion of the Louisville Bridges Project, as well as to finance the \$290 million

necessary to fund the US 68/KY 80 bridges over Kentucky Lake and Lake Barkley. The projections for the debt service required for these projects in FY 2011 through FY 2014 are listed as appropriate in this document under Jefferson, Trigg, and Marshall Counties.

Appendix B of this document contains a report on the status of Road Fund bonds also authorized by the 2005 and 2006 General Assemblies. These road bonds were sold for the expressed purpose of funding "SP" projects that had been presented in the 2004 Six-Year Highway Plan, as amended by the 2005 state legislature, and the 2006 Highway Plan. The total amount of bond funding authorized for "SP" projects by the 2005 and 2006 General Assemblies was \$650 million. These funds have been fully obligated to projects.

Appendix C of the 2008 Highway Plan contains a status report for "Mega-Projects" that the KYTC is involved with at this time. These "Mega-Projects" are (1) the Louisville Bridges, (2) the I-75/71 Brent Spence Bridge in Northern Kentucky, (3) the proposed routing of I-66 through Kentucky, and (4) the proposed I-69 improvements through western Kentucky. A discussion of the funding and project development parameters for each "Mega-Project" is provided in Appendix C.

One "Mega-Project" stands clearly in front of the rest in this document. The Louisville Bridges Project has been under development for many years and has progressed to the point that substantial capital outlays will be required in this edition of the Highway Plan. As mentioned previously in this section, the KYTC anticipates selling \$361 million in GARVEE Bonds in FY 2011 to help support these costs. Also contained within the core federal program funding associated with the 2008 Highway Plan is an additional \$245 million to fund design, mitigation, and other preconstruction activities for the project. We have also included in this Highway Plan \$845 million of "Innovative Financing" for this project that is expected to be provided through enabling legislation currently under consideration by the 2008 Kentucky General Assembly. The KYTC has made it clear in testimony before legislative committees that we cannot afford the Louisville Bridges Project without significant funding provided through non-traditional resources. As the 2008 General Assembly debated this project and

innovative funding possibilities, other "Mega-Projects" watched to determine if there is hope for a future funding avenue, or whether their project will be indefinitely postponed. For the Louisville Bridges Project, funding amounts from all sources total \$1.44 billion, and are tabulated in **Figure 6**.

As the 2008 Highway Plan was developed, it was recognized that the state-funded "SP" projects in the Plan do not match expected state

Louisville Bridges Projected Outlays (\$ Millions)										
TRADITIONAL FUNDS	2008	2009	2010	2011	2012	2013	2014	TOTAL		
Interstate Maintenance (IM)	20.2	34.0	20.1	16.0	16.0	16.0	16.0	138.2		
National Highways (NH)	33.2	68.9	49.2	31.2	28.5	25.1	25.1	261.1		
Surface Transportation (STP)	3.1	1.1	1.9	0.0	0.0	0.0	0.0	6.1		
ACTUAL 6YP OUTLAYS (W/GARVEE DEBT SERVICE)	56.5	103.9	71.1	47.2	44.5	41.1	41.1	405.4		
6YP Buying Power w/GARVEE	56.5	103.9	71.1	47.6	29.3	145.9	142.7	597.1		
INNOVATIVE FINANCING	2008	2009	2010	2011	2012	2013	2014	TOTAL		
Innovative Finance (IF)	0.0	0.0	0.0	89.8	218.3	312.5	224.3	844.9		
COMBINED FUNDING	2008	2009	2010	2011	2012	2013	2014	TOTAL		
GRAND TOTAL ALL SOURCES	56.5	103.9	71.1	137.4	247.5	458.5	367.0	1,442.0		



fund revenues for FY 2009-2014. The "SP" projects in this edition of the Plan carry all of the Governor's originally recommended projects from February 2008, as well as, carry forward all previously enacted projects as the "SP priorities of record" to manage future revenues against. During the 2008 Legislative Session, the General Assembly also added \$317 million of additional projects to the "SP" Account (see "House Projects Added" and "Senate Projects Added" tabs under "Project Listing and Location Maps." Even with the addition of two new years worth of state and federal funding, the revenue gap is still a huge problem and must be recognized as state and federal cost accountability issues are considered. Of particular concern is the application of "fiscal constraint" to the federal-aid highway element of the highway plan, which is required by federal law to be fiscally balanced.

Immediately upon completion of the state legislative process, the KYTC will extract the subset of federal projects from the 2008 Highway Plan and present those to the Federal Highway Administration (FHWA) for approval. Known as the Statewide Transportation Improvement Program (STIP), the federal projects must also be accompanied by a listing of those regionally significant state-funded projects that could affect air quality and other planning concerns. Fiscal constraint is an increasingly important consideration for federal agencies, and the STIP is the document through which fiscal constraint is measured. Any state legislative efforts that result in the over-programming of the federal element of the Highway Plan cannot be accommodated by the federal rules governing the STIP process. Failure to gain FHWA approval would result in the suspension of the annual federal-aid program and its \$650 million (approximate) annual budget to Kentucky.

### IV. The Truth: "This is not a 'Six-Year' Highway Plan"

ince 1982, the Kentucky Transportation Cabinet has been required by Kentucky Revised Statutes (KRS), Chapter 176, to submit a fiscally-balanced Six-Year Highway Plan to the state General Assembly for approval with each Executive Budget submitted by the Governor. Prior to the Year 2000, the Highway Plan was submitted in accordance with state law, and the list of projects contained in the Plan was constrained by the state and federal funding anticipated for each of the six years featured in the document.

In the Year 2000, the FY 2002-2007 edition of the Highway Plan was built upon the assumption that a 7-cents-per-gallon gasoline tax increase would be enacted by the 2000 General Assembly, and that 6 cents of that tax increase would go directly to support FY 2002-2007 Highway Plan projects. The additional 6-cents per gallon would have generated approximately \$180 million in new Road Fund revenues annually, and would have totaled \$1.08 billion over the six-year period. When the 7-cent-per-gallon gas tax increase failed to be ratified by the 2000 General Assembly, neither the Executive Branch nor the Legislative Branch desired to be responsible for the removal of \$1.08 billion of projects from the Highway Plan. Rather, the KYTC was given the directive by the General Assembly to move from an "obligation-based" method of authorizing project expenditures to a "cash flow" method of managing Road Fund dollars in an effort to squeeze as much out of the available Road Fund cash as possible. Since 2000, each edition of the Highway Plan has yielded a progressively rising level of project commitments that are unsupported by sufficient Road Fund moneys and are increasingly subjected to inflationary effects. In the past three years alone, inflation has increased individual project costs by more than 40%, and the total amount that the state-funded portion of the Highway Plan is under-funded now exceeds \$3 billion.

Does the public truly understand the nature of the problem presented by a grossly under-funded Highway Plan? The average citizen likely does not. When a Highway Plan is prepared by the KYTC and enacted by the General Assembly, the public expects that the projects within that plan will be built within a reasonable amount of time. When the Highway Plan is under-funded by over \$3 billion in a funding category where state construction revenues accrue at a rate of about \$200 million annually, we no longer have a "six-year" plan. In fact, the "State Projects (SP)" section of the Highway Plan is more correctly a "15-year" plan. Even though the federal projects are fiscally constrained each year as required by federal law, the problems associated with an over-burdened "SP" account necessitate that the KYTC refrain from addressing the projects in this book as a "six-year plan." In truth, this document is nothing more than this edition's title reflects: a "Highway Plan."

## **APPENDICES**

Appendix A: GARVEE Program Status

Appendix B: 2005 and 2006 Bond Program Status

Appendix C: "Mega-Projects" Status